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TECH CENTER 1600/2900

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,696B

DATE: 10/03/2001

TIME: 08:31:45

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6/16/02  
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10/2002  
(63)

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\10032001\I700696B.raw

4 <110> APPLICANT: Rowe, Peter  
 6 <120> TITLE OF INVENTION: A Novel Polypeptide Hormone Phosphatonin  
 9 <130> FILE REFERENCE: VOSS001  
 11 <140> CURRENT APPLICATION NUMBER: US 09/700,696B  
 12 <141> CURRENT FILING DATE: 2000-11-17  
 14 <150> PRIOR APPLICATION NUMBER: PCT EP99/03403  
 15 <151> PRIOR FILING DATE: 1999-05-18  
 17 <150> PRIOR APPLICATION NUMBER: GB 9810681.8  
 18 <151> PRIOR FILING DATE: 1998-05-18  
 20 <150> PRIOR APPLICATION NUMBER: GB 9819387.3  
 21 <151> PRIOR FILING DATE: 1998-09-04  
 23 <160> NUMBER OF SEQ ID NOS: 25  
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 1655  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Homo sapiens  
 32 <400> SEQUENCE: 1

ENTERED

33	gtgaataaaag	aatatagtat	cagtaacaaa	gagaatactc	acaatggcct	gaggatgtca	60
34	atttatccta	agtcaactgg	gaataaaaggg	tttgaggatg	gagatgtatgc	tatcagcaaa	120
35	ctacatgacc	aagaagaata	tggcgagct	ctcatcagaa	ataacatgca	acatataatg	180
36	ggcccgagtga	ctgcgattaa	actcctgggg	gaagaaaaaca	aagagaacac	acctaggaat	240
37	tttctaaaca	taatcccagc	aagtatgaat	tatgctaaag	cacactcgaa	ggataaaaaag	300
38	aagcctcaaa	gagattccca	agccccagaaa	agtccagtaa	aaagcaaaaag	caccatcgt	360
39	attcaacaca	acattgacta	cctaaaacat	ctctcaaaag	tcaaaaaat	ccccagtgtat	420
40	tttgaaggca	gcggttatac	agatcttcaa	gagaggggg	acaatgtat	atctcctttc	480
41	agtggggacg	gccaacctt	taaggacatt	cctggtaaag	gagaagctac	ttgtcctgac	540
42	ctagaaggca	aagatattca	aacagggttt	gcaggccaa	gtgaagctga	gagtactcat	600
43	cttgacacaa	aaaagccagg	ttataatgag	atcccagaga	gagaagaaaa	ttgtggaaat	660
44	accattggaa	ctaggatga	aactgcggaa	gaggcagatg	ctgttgatgt	cagccttgta	720
45	gagggcagca	acgatatcat	ggtagtacc	aatttttaagg	agctccctgg	aagagaagga	780
46	aacagagtgg	atgctggcag	ccaaaatgct	caccaaggga	aggttgagtt	tcattaccct	840
47	cctgcaccct	caaaaagagaa	aagaaaagaa	ggcagtagtg	atgcagctga	aagtaccaac	900
48	tataatgaaa	ttcctaaaaa	tggcaaaggc	agtaccagaa	agggtgtaga	tcattctaatt	960
49	aggaaccaag	caacctaaa	tgaaaaacaa	aggttccct	gtaaggccaa	aagttagggc	1020
50	ctgcccattc	cttctcgtag	tcttgataat	gaaatcaaaa	acgaaatgg	ttccttaat	1080
51	ggccccagtc	atgagaatat	aataacacat	ggcagaaaat	atcattatgt	accccacaga	1140
52	caaaaataatt	ctacacggaa	taagggtatg	ccacaaggga	aaggctcctg	gggttagacaa	1200
53	ccccattcca	acaggagggt	tagtccctg	agaaggatg	acagtagtga	gtcatctgac	1260
54	agtggcagtt	caagtgaag	cgatggtgac	tagtccacca	ggagttccca	gcggggtgac	1320
55	agtctgaaga	cctcgtaacc	tgtgagttga	tgttagaggag	agccacctga	cagctgacca	1380
56	ggtgaagaga	ggatagatgt	aagaactgag	tgagccaaaga	atcctgttct	ccttggggga	1440
57	atttttgcta	tcttaatagt	cacagtataa	aattcttatta	aaggctataa	tgttttaag	1500
58	aaaaaaaaaa	tcattacaga	tctatgaaat	aggtaacatt	ttagtaggtg	tctttttaaa	1560
59	atagttggtg	aatgtcacaa	atgccttcta	tgttgttgc	tctgtagaca	tgaaaataaaa	1620
60	caatatctct	cgatgataaa	aaaaaaaaaa	aaaaaa			1655

62 &lt;210&gt; SEQ ID NO: 2

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Input Set : A:\Seqlist.txt  
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63 <211> LENGTH: 430  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Homo sapiens  
 67 <400> SEQUENCE: 2  
 68 Val Asn Lys Glu Tyr Ser Ile Ser Asn Lys Glu Asn Thr His Asn Gly  
 69 1 5 10 15  
 70 Leu Arg Met Ser Ile Tyr Pro Lys Ser Thr Gly Asn Lys Gly Phe Glu  
 71 20 25 30  
 72 Asp Gly Asp Asp Ala Ile Ser Lys Leu His Asp Gln Glu Glu Tyr Gly  
 73 35 40 45  
 74 Ala Ala Leu Ile Arg Asn Asn Met Gln His Ile Met Gly Pro Val Thr  
 75 50 55 60  
 76 Ala Ile Lys Leu Leu Gly Glu Glu Asn Lys Glu Asn Thr Pro Arg Asn  
 77 65 70 75 80  
 78 Val Leu Asn Ile Ile Pro Ala Ser Met Asn Tyr Ala Lys Ala His Ser  
 79 85 90 95  
 80 Lys Asp Lys Lys Pro Gln Arg Asp Ser Gln Ala Gln Lys Ser Pro  
 81 100 105 110  
 82 Val Lys Ser Lys Ser Thr His Arg Ile Gln His Asn Ile Asp Tyr Leu  
 83 115 120 125  
 84 Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser Asp Phe Glu Gly Ser  
 85 130 135 140  
 86 Gly Tyr Thr Asp Leu Gln Glu Arg Gly Asp Asn Asp Ile Ser Pro Phe  
 87 145 150 155 160  
 88 Ser Gly Asp Gly Gln Pro Phe Lys Asp Ile Pro Gly Lys Gly Glu Ala  
 89 165 170 175  
 90 Thr Gly Pro Asp Leu Glu Gly Lys Asp Ile Gln Thr Gly Phe Ala Gly  
 91 180 185 190  
 92 Pro Ser Glu Ala Glu Ser Thr His Leu Asp Thr Lys Lys Pro Gly Tyr  
 93 195 200 205  
 94 Asn Glu Ile Pro Glu Arg Glu Glu Asn Gly Gly Asn Thr Ile Gly Thr  
 95 210 215 220  
 96 Arg Asp Glu Thr Ala Lys Glu Ala Asp Ala Val Asp Val Ser Leu Val  
 97 225 230 235 240  
 98 Glu Gly Ser Asn Asp Ile Met Gly Ser Thr Asn Phe Lys Glu Leu Pro  
 99 245 250 255  
 100 Gly Arg Glu Gly Asn Arg Val Asp Ala Gly Ser Gln Asn Ala His Gln  
 101 260 265 270  
 102 Gly Lys Val Glu Phe His Tyr Pro Pro Ala Pro Ser Lys Glu Lys Arg  
 103 275 280 285  
 104 Lys Glu Gly Ser Ser Asp Ala Ala Glu Ser Thr Asn Tyr Asn Glu Ile  
 105 290 295 300  
 106 Pro Lys Asn Gly Lys Gly Ser Thr Arg Lys Gly Val Asp His Ser Asn  
 107 305 310 315 320  
 108 Arg Asn Gln Ala Thr Leu Asn Glu Lys Gln Arg Phe Pro Ser Lys Gly  
 109 325 330 335  
 110 Lys Ser Gln Gly Leu Pro Ile Pro Ser Arg Gly Leu Asp Asn Glu Ile  
 111 340 345 350  
 112 Lys Asn Glu Met Asp Ser Phe Asn Gly Pro Ser His Glu Asn Ile Ile

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Input Set : A:\Seqlist.txt

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113           355                   360                   365  
114 Thr His Gly Arg Lys Tyr His Tyr Val Pro His Arg Gln Asn Asn Ser  
115       370                   375                   380  
116 Thr Arg Asn Lys Gly Met Pro Gln Gly Lys Gly Ser Trp Gly Arg Gln  
117 385                   390                   395                   400  
118 Pro His Ser Asn Arg Arg Phe Ser Ser Arg Arg Arg Asp Asp Ser Ser  
119                   405                   410                   415  
120 Glu Ser Ser Asp Ser Gly Ser Ser Glu Ser Asp Gly Asp  
121       420                   425                   430  
122 <210> SEQ ID NO: 3  
123 <211> LENGTH: 4  
124 <212> TYPE: PRT  
125 <213> ORGANISM: Artificial Sequence  
127 <220> FEATURE:  
128 <223> OTHER INFORMATION: glycosaminoglycan attachment motif  
130 <400> SEQUENCE: 3  
131 Ser Gly Asp Gly  
132 1  
133 <210> SEQ ID NO: 4  
134 <211> LENGTH: 7  
135 <212> TYPE: PRT  
136 <213> ORGANISM: Artificial Sequence  
138 <220> FEATURE:  
139 <223> OTHER INFORMATION: metalloproteinase cleavage site  
141 <400> SEQUENCE: 4  
142 Ala Asp Ala Val Asp Val Ser  
143 1                   5  
144 <210> SEQ ID NO: 5  
145 <211> LENGTH: 22  
146 <212> TYPE: PRT  
147 <213> ORGANISM: Homo sapiens  
149 <400> SEQUENCE: 5  
150 Ser Ser Arg Arg Arg Asp Asp Ser Ser Glu Ser Ser Asp Ser Gly Ser  
151 1                   5                   10                   15  
152 Ser Ser Glu Ser Asp Gly  
153                   20  
154 <210> SEQ ID NO: 6  
155 <211> LENGTH: 21  
156 <212> TYPE: PRT  
157 <213> ORGANISM: Homo sapiens  
159 <400> SEQUENCE: 6  
160 Ser Ser Arg Ser Lys Glu Asp Ser Asn Ser Thr Glu Ser Lys Ser Ser  
161 1                   5                   10                   15  
162 Ser Glu Glu Asp Gly  
163                   20  
166 <210> SEQ ID NO: 7  
167 <211> LENGTH: 14  
168 <212> TYPE: PRT  
169 <213> ORGANISM: Homo sapiens

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Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\10032001\I700696B.raw

171 <400> SEQUENCE: 7  
 172 Asp Ser Ser Glu Ser Ser Asp Ser Gly Ser Ser Ser Glu Ser  
 173 1 5 10  
 176 <210> SEQ ID NO: 8  
 177 <211> LENGTH: 38  
 178 <212> TYPE: DNA  
 179 <213> ORGANISM: Artificial Sequence  
 181 <220> FEATURE:  
 182 <223> OTHER INFORMATION: primer with overhang linker sequence  
 185 <400> SEQUENCE: 8  
 186 gacgacgaca aggtgaataa agaataatgt atcagtaa 38  
 188 <210> SEQ ID NO: 9  
 189 <211> LENGTH: 35  
 190 <212> TYPE: DNA  
 191 <213> ORGANISM: Artificial Sequence  
 193 <220> FEATURE:  
 194 <223> OTHER INFORMATION: primer with overhang linker sequence  
 197 <400> SEQUENCE: 9  
 198 ggaacaagac ccgtcttagtc accatcgctc tcact 35  
 200 <210> SEQ ID NO: 10  
 201 <211> LENGTH: 15  
 202 <212> TYPE: PRT  
 203 <213> ORGANISM: Homo sapiens  
 205 <400> SEQUENCE: 10  
 206 Asp Asp Ser Ser Glu Ser Ser Asp Ser Gly Ser Ser Ser Glu Ser  
 207 1 5 10 15  
 210 <210> SEQ ID NO: 11  
 211 <211> LENGTH: 16  
 212 <212> TYPE: PRT  
 213 <213> ORGANISM: Homo sapiens  
 215 <400> SEQUENCE: 11  
 216 Asp Asp Ser Ser Glu Ser Ser Asp Ser Gly Ser Ser Ser Glu Ser Asp  
 217 1 5 10 15  
 220 <210> SEQ ID NO: 12  
 221 <211> LENGTH: 22  
 222 <212> TYPE: PRT  
 223 <213> ORGANISM: Homo sapiens  
 225 <400> SEQUENCE: 12  
 226 Ser Ser Arg Arg Arg Asp Asp Ser Ser Glu Ser Ser Asp Ser Gly Ser  
 227 1 5 10 15  
 228 Ser Ser Glu Ser Asp Gly  
 229 20  
 232 <210> SEQ ID NO: 13  
 233 <211> LENGTH: 14  
 234 <212> TYPE: PRT  
 235 <213> ORGANISM: Homo sapiens  
 237 <400> SEQUENCE: 13  
 238 Asp Ser Ser Asp Ser Ser Asp Ser Ser Ser Asp Ser  
 239 1 5 10

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Input Set : A:\Seqlist.txt  
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242 <210> SEQ ID NO: 14  
243 <211> LENGTH: 15  
244 <212> TYPE: PRT  
245 <213> ORGANISM: Homo sapiens  
247 <400> SEQUENCE: 14  
248 Asp Asp Ser Ser Asp Ser Ser Asp Ser Ser Asp Ser  
249 1 5 10 15  
252 <210> SEQ ID NO: 15  
253 <211> LENGTH: 14  
254 <212> TYPE: PRT  
255 <213> ORGANISM: Homo sapiens  
257 <400> SEQUENCE: 15  
258 Asp Ser Ser Asp Ser Ser Asp Ser Asn Ser Ser Asp Ser  
259 1 5 10  
262 <210> SEQ ID NO: 16  
263 <211> LENGTH: 14  
264 <212> TYPE: PRT  
265 <213> ORGANISM: Homo sapiens  
267 <400> SEQUENCE: 16  
268 Asp Ser Ser Glu Ser Ser Asp Ser Ser Asn Ser Ser Asp Ser  
269 1 5 10  
272 <210> SEQ ID NO: 17  
273 <211> LENGTH: 14  
274 <212> TYPE: PRT  
275 <213> ORGANISM: Homo sapiens  
277 <400> SEQUENCE: 17  
278 Asp Ser Ser Asp Ser Ser Asp Ser Ser Asn Ser Ser Asp Ser  
279 1 5 10  
282 <210> SEQ ID NO: 18  
283 <211> LENGTH: 16  
284 <212> TYPE: PRT  
285 <213> ORGANISM: Homo sapiens  
287 <400> SEQUENCE: 18  
288 Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu Ser Asp  
289 1 5 10 15  
292 <210> SEQ ID NO: 19  
293 <211> LENGTH: 11  
294 <212> TYPE: PRT  
295 <213> ORGANISM: Homo sapiens  
297 <400> SEQUENCE: 19  
298 Ser Asp Glu Ser His His Ser Asp Glu Ser Asp  
299 1 5 10  
302 <210> SEQ ID NO: 20  
303 <211> LENGTH: 11  
304 <212> TYPE: PRT  
305 <213> ORGANISM: Homo sapiens  
307 <400> SEQUENCE: 20  
308 Ser Asp Ser Ser Ser Ser Asp Ser Ser Asp  
309 1 5 10

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/700,696B

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Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\10032001\I700696B.raw